

C4ISR

PROJECT DESCRIPTION:

Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems are at the heart of every major Coast Guard activity. Required to successfully execute the Coast Guard's many missions, C4ISR equipment and software provide essential situational awareness, data processing and information exchange tools required to modernize and recapitalize Coast Guard shore sites, surface and aviation assets. These robust, secure and interoperable systems are the "mission enablers" that collect, process, interpret and share data from multiple sources while communicating with law enforcement and military counterparts.

The C4ISR project develops asset baselines, comprised of a core software and hardware suite for each Coast Guard asset that integrates specific sensors, communications systems and intelligence information into a consolidated operating picture. C4ISR's goal is to deliver a baseline design tailored to each asset in order to lower life cycle costs for training, logistical support and deployment.

A C4ISR-equipped asset can process a variety of inputs—such as surface or air search radars, and friend or foe identification data—onto a common user display that is combined with information from other sources. The results can then be filtered and displayed for both local area and global operational awareness. This common operating picture increases the Coast Guard's ability to succeed at its life saving and maritime security missions.

C4ISR technology provides increased interoperability, situational awareness and new levels of maritime domain awareness for the Coast Guard and its maritime partners. C4ISR architectural improvements establish secure voice, video and data



exchanges at multiple security levels. The C4ISR project also upgrades in-service assets to ensure that as the Coast Guard transitions to newer assets, existing platforms remain functional and interoperable.

The C4ISR project's initial concentration has been on developing asset baselines for the National Security Cutter (NSC), HC-130J and HC-144A.

- As the Coast Guard awards contracts to modernize its surface and air fleet, new asset baselines will be developed for each project.
- Asset baselines have already been delivered for the HC-144A and HC-130J's Mission Systems Pallets, including the first Secret Internet Protocol Router Network (SIPRNET) capability on a U.S. aircraft, and the NSC's Sensitive Compartmented Information Facility (SCIF), the first on a non-Department of Defense (DoD) vessel.
- The Coast Guard is currently adding capability to improve interoperability for joint operations with DoD, the Department of Homeland Security, law enforcement and foreign allies.
- Efforts will provide the necessary open architecture software foundation to reduce lifecycle costs for each Coast Guard asset.